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Distribution of pairing functions in superconducting spin-valve switching modes

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Abstract

© Published under licence by IOP Publishing Ltd.We investigated the critical temperature Tc of SF1F2 trilayers (S is a singlet superconductor, F1 and F2 are ferromagnetic metals), where the long-range triplet superconducting pairing is generated at canted magnetizations of the F layers. We examined the spin-singlet and spin-triplet pairing distributions and their amplitudes as a function of the layers thicknesses under different values of the angle a in the SF1F2 structure to clarify which one of the pairing distributions and how may affect the superconducting Tc .

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